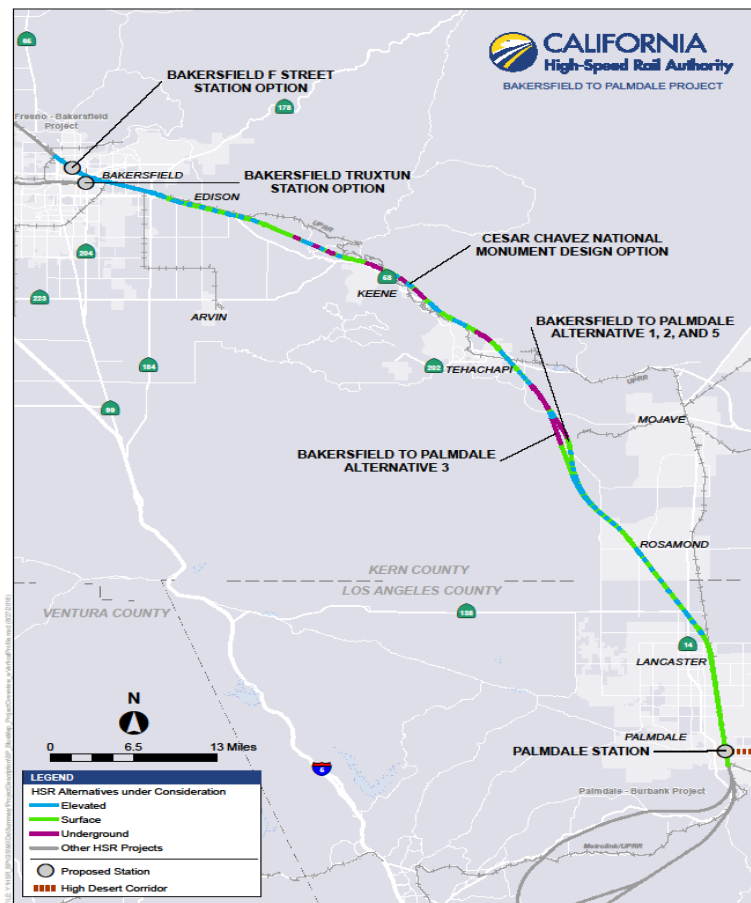


BAKERSFIELD TO PALMDALE

ENVIRONMENTAL PROCESS

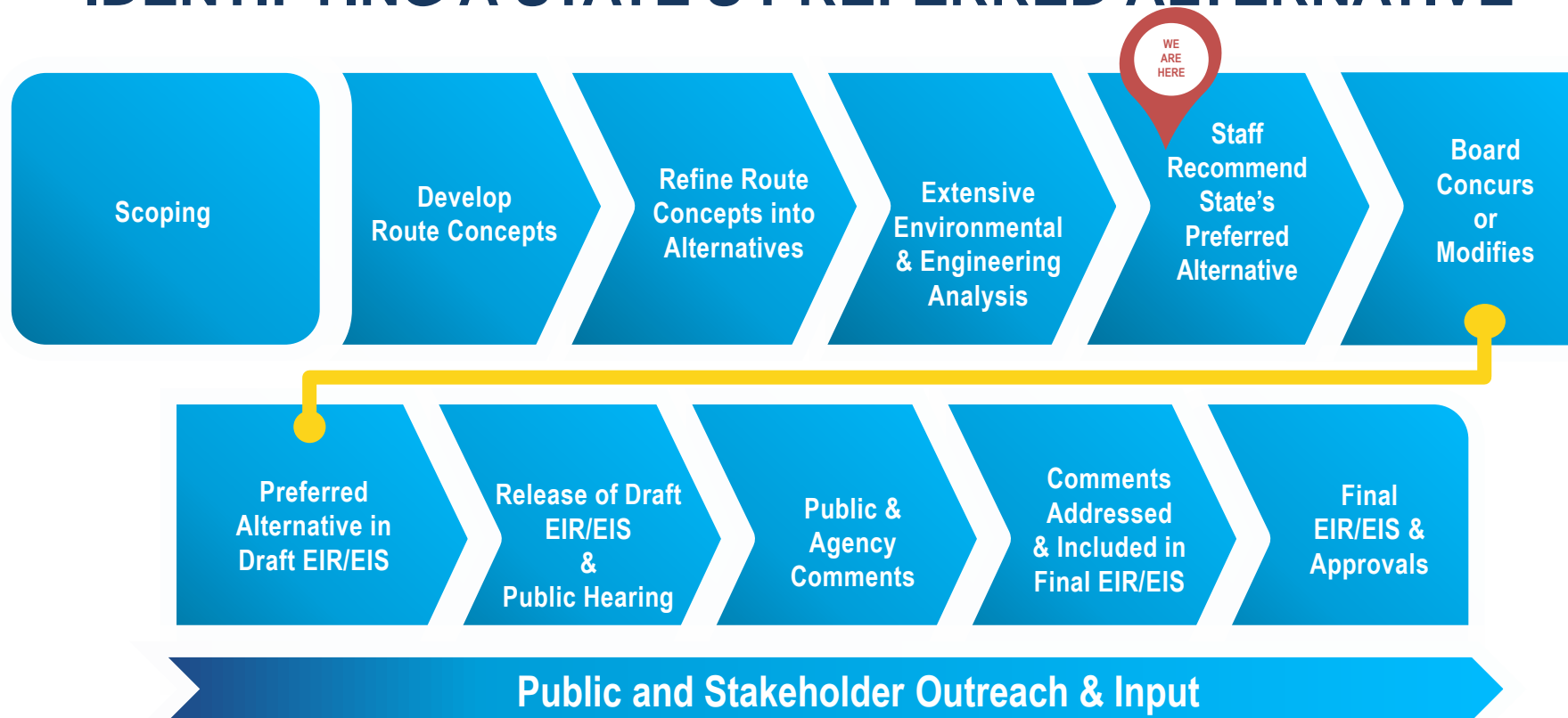




BAKERSFIELD TO PALMDALE PROJECT SECTION

- Approximately 80 miles long
- Two proposed stations:
 1. Bakersfield (Central Valley) (F Street Station Preferred Option)
 2. Palmdale Transportation Center (Antelope Valley)

ENVIRONMENTAL PROCESS & IDENTIFYING A STATE'S PREFERRED ALTERNATIVE



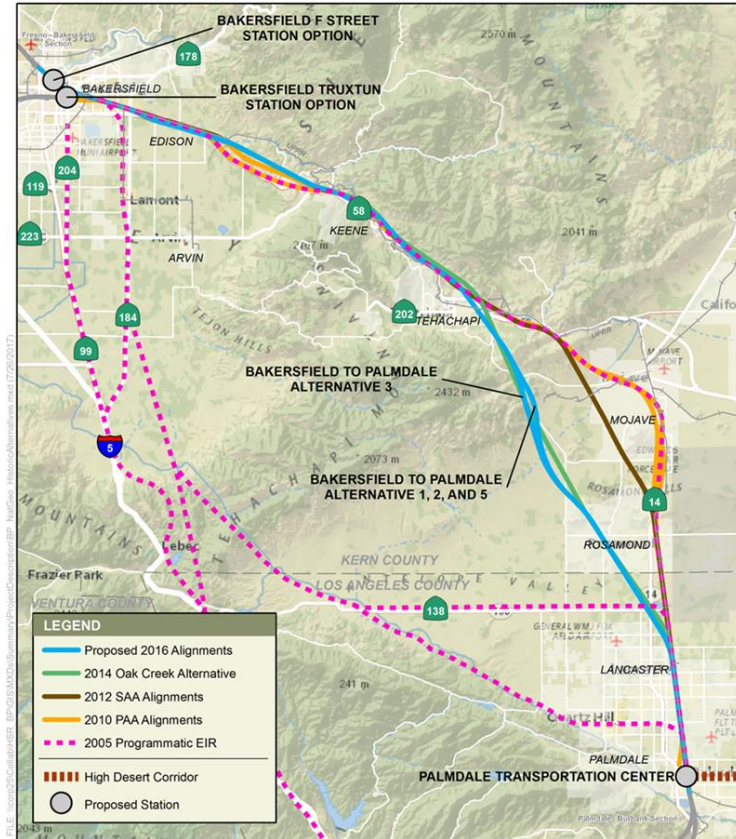
ENVIRONMENTAL ANALYSIS

- Data Collection
- Literature Review
- Interviews
- Geographic Information Systems (GIS)
- Field Surveys
- Remote Sensing
- Modeling



ALTERNATIVES DEVELOPMENT OVERVIEW

- 2005 Program EIR/EIS
- 2010 Preliminary Alternatives Analysis (PAA) Report
- 2012 Supplemental Alternatives Analysis (SAA) Report
- 2016 Supplemental Alternatives Analysis (SAA) Report



IDENTIFYING THE STATE'S PREFERRED ALTERNATIVE

- The Authority's Board of Directors is scheduled to concur with or modify the State's Preferred Alternative in October 2018
- Federal NEPA law now encourages federal and state agencies to identify a Preferred Alternative *before* the release of the Draft Environmental Documents



IDENTIFYING THE STATE'S PREFERRED ALTERNATIVE

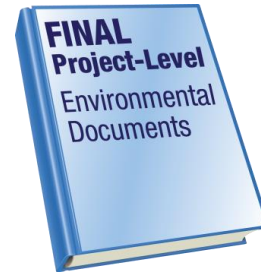
- Staff will recommend **Alternative 2** as the State's Preferred Alternative in the Draft EIR/EIS
- Staff further recommends incorporation of the Cesar Chavez National Monument (CCNM) Design Option
- **Alternative 2 with CCNM Design Option:**
 - » Reduces travel time between Bakersfield and Palmdale
 - » Does not require relocation of SR-58
 - » Has fewer miles of tunnel construction
 - » Consolidates rail line into one corridor in Lancaster
 - » Results in fewer potential impacts to residents, businesses, community resources and the environment
 - » Reduces noise and visual impact at CCNM
- The final State's Preferred Alternative will be selected upon adoption of the Final Environmental Documents in 2020



ENVIRONMENTAL DOCUMENTS



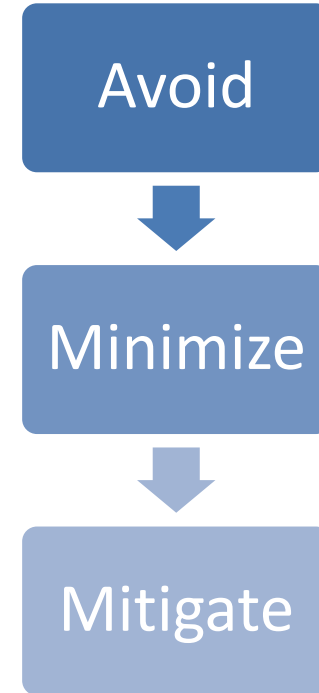
- Aesthetics & Visual Quality
- Air Quality & Global Climate Change
- Biological Resources & Wetlands
- Cultural Resources
- Cumulative Impacts
- Electromagnetic Interference/Fields (EMI/EMF)
- Environmental Justice
- Geology, Soils, Seismicity & Paleontology
- Hazardous Materials & Wastes
- Hydrology & Water Resources



- Station Planning, Land Use & Development
- Noise & Vibration
- Parks, Recreation & Open Space
- Public Utilities & Energy
- Regional Growth
- Safety & Security
- Section 4(f) & Section 6(f) Evaluations
- Socioeconomics & Communities
- Transportation

AVOIDING, MINIMIZING & MITIGATING POTENTIAL IMPACTS

- **Authority strives to:**
 1. **Avoid** adverse impacts
 2. **Minimize** impacts, when they cannot be avoided
 3. **Mitigate** impacts, when they cannot be avoided or minimized
- **Ongoing during Planning & Design**
 - » Based on community and stakeholder feedback
 - » Ongoing agency coordination



AVOIDING, MINIMIZING & MITIGATING POTENTIAL IMPACTS: EXAMPLES

- **Noise**

- » Locate tracks as far away from sensitive noise receptors as feasible (avoid)
- » Use vehicle skirts on trains to reduce wheel/steel noise (minimize)
- » Construct noise walls (mitigate)

- **Property Impacts**

- » Locate tracks as far away from occupied properties as feasible (avoid)
- » Design project footprint as narrow as possible (minimize)
- » Prepare a relocation plan with focus on identifying available parcels closest to current locations (mitigate)

- **Temporary Construction Period**

- » Minimize noise by constructing during daytime & by use of quiet equipment
- » Reduce traffic impacts with detour plans & construction phasing
- » Reduce air pollution with dust suppression & low-polluting equipment

NOISE MITIGATION MEASURES: EXAMPLES

- **Design**

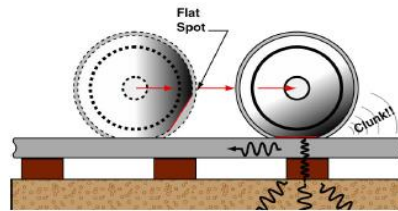
- » Sound barrier location/height/type determined if needed
- » Stringent vehicle specifications to find quietest vehicles
- » Provide insulation for noise sensitive buildings

- **Construction**

- » Avoid nighttime construction in residential neighborhoods
- » Re-route construction truck traffic along roadways that will cause least disturbance to residents
- » Use moveable sound barriers at source of construction activity

- **Operations**

- » Frequent wheel and rail grinding to minimize wheel flat noise
- » Rail lubrication on sharp curves to minimize wheel squeal



Wheel Flats

VISUAL MITIGATION MEASURES: EXAMPLES

- **Transparent sound barriers along elevated guideways**
 - » Where sensitive views may be blocked
- **Architectural catenary poles in sensitive areas**
 - » Historic districts, for example
- **Attractive designs on retaining walls**
- **Match existing bridges**
 - » Provide landscaping at abutments
- **Vegetative buffers & berms**



BAKERSFIELD TO PALMDALE TIMELINE*



* Subject to Change

STAY INVOLVED

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